Response dated February 25, 2009

Reply to Office Action of September 26, 2008

Page 3

## Amendments to the Claims:

1. (Currently amended) A compound method for producing forming [[of]] a taxane or precursor or analog thereof from a raw material, the raw material comprising a compound represented by the formula below:

wherein, R2 is H, Ac or a protecting group;

R<sub>3</sub> is H, xylosyl or protecting group;

R<sub>4</sub> is H or protecting group;

R<sub>N</sub> is H or an alkyl group; and

X= deprotonated sulfuric acid or deprotonated sulfur containing acid; deprotonated nitric acid or other nitrogen containing acid; deprotonated carboxylic acid, except trifluoro acetic acid; deprotonated phosphoric acid or any phosphorus containing acid; deprotonated tartaric acid; deprotonated p-toluene sulfonic acid; or deprotonated picric acid; and

wherein said taxane or precursor or analog thereof is in a solid, purified form; the method comprising benzoylating the raw material with a benzoylation solution comprising a benzoylating agent and a buffer such that the pH of the benzoylation solution is about 4 to about 6.

2. (Currently amended) The compound method of claim 1, in solid form wherein the buffer comprises a phosphate buffer.

Response dated February 25, 2009

Reply to Office Action of September 26, 2008

Page 4

3. (Currently amended) The compound method of claim 2, in solid substantially purified form wherein the phosphate buffer is of about pH 7.

- 4. (Currently amended) The compound method of claim 1, wherein  $R_2$  is Ac and  $R_3$  is H.
- 5. (Currently amended) The empound method of claim 1, wherein  $R_2$  is H and  $R_3$  is H.
- 6. (Currently amended) The compound method of claim 1, wherein R<sub>2</sub> is Ac and R<sub>3</sub> is xylosyl.
- 7. (Currently amended) The eompound  $\underline{method}$  of claim 1, wherein  $R_2$  is H and  $R_3$  is xylosyl.
- 8. (Currently amended) The compound method of claim 1, wherein R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> is the protecting group selected from the group consisting of triethylsilyl, trimethylsilyl, trichloroethoxycarbonyl [[or]] and ethoxyethyl ether.
- 9. (Currently amended) The compound  $\underline{\text{method}}$  of claim 1, wherein  $R_3$  and  $R_4$  is a protecting group selected from the group consisting of triethylsilyl, triethylsilyl, trichloroethoxycarbonyl and ethoxyethyl ether.
- 10. (Currently amended) The compound method of claim 1, wherein  $R_3$  and  $R_4$  is trimethylsilyl.
- 11. (Currently amended) The eompound method of claim 1, wherein  $R_4$  is a protecting group selected from the group consisting of triethylsilyl, triethylsilyl, trichloroethoxycarbonyl and ethoxyethyl ether.

Response dated February 25, 2009

Reply to Office Action of September 26, 2008

Page 5

12. (Currently amended) The compound method of claim 1, wherein  $R_4$  is trimethylsilyl.

13. (Currently amended) A method of forming a taxane <u>amine or salt</u> comprising the steps of: (i) contacting a taxane imine <u>according to the formula below</u> with a <u>protic</u> solvent; and (ii) contacting a taxane imine with a sulphate containing acid; said taxane imine having the formula:

wherein,  $R_1$  =alkyl, aryl, carbonyl or ether group;

 $R_2 = H$ , alkyl, aryl, ester, ether or protecting group;

R<sub>3</sub> =H, alkyl, aryl, ether, ester, xylosyl, or protecting group;

 $R_4 = H$  or protecting group;

(ii) contacting the taxane imine with an acid useful to effect hydrolysis of the imine; and

(iii) isolating a solid, purified taxane amine or salt by adding a solvent that is less polar than said protic solvent.

14-61. (Canceled)

62. (Currently amended) The compound method of claim 1, wherein X is a deprotonated nitric acid or other nitrogen containing acids.

Response dated February 25, 2009

Reply to Office Action of September 26, 2008

Page 6

- 63. (Currently amended) The compound method of claim 1, wherein X is a deprotonated sulfur containing acid.
- 64. (Currently amended) The compound method of claim 1, wherein X is a deprotonated carboxcyclic acid, except trifluro acetic acid.
- 65. (Currently amended) The compound method of claim 1, wherein X is deprotonated phosphoric acid or any phosphorus containing acid.
- 66. (Currently amended) The compound method of claim 1, wherein X is deprotonated tartaric acid.
- 67. (Currently amended) The compound method of claim 1, wherein X is deprotonated perchloric acid.
- 68. (Currently amended) The compound method of claim 1, wherein X is deprotonated p-tolulene sulfonic acid, and said compound is in solid form.
- 69. (Currently amended) The compound method of claim 1, wherein X is a deprotonated picric acid.

## 70 - 100 (Canceled)

- 101. (Currently amended) The compound method of claim 1, wherein the compound is for the production of formed taxane is taxol A.
- 102. (Currently amended) The compound method of claim 1, wherein the compound is for the production of formed taxane is taxol B.
  - 103. (Currently amended) The compound method of claim 1, wherein the

Response dated February 25, 2009

Reply to Office Action of September 26, 2008

Page 7

compound is for the production of formed taxane is taxol C.

- 104. (Currently amended) The compound method of claim 1, wherein the compound is for the production of formed taxane is taxol D.
- 105. (Currently amended) The compound method of claim 1, wherein the compound is for the production of formed taxane is taxol E.
- 106. (Currently amended) The compound method of claim 1, wherein the compound is for the production of formed taxane is taxol F.
- 107. (Currently amended) The compound method of claim 1, wherein the compound is for the production of formed taxane is taxol G.
- 108. (Currently amended) The compound method of claim 1, wherein the compound is for the production of formed taxane is Docetaxel.
- 109. (Currently amended) The compound method of claim 1, wherein the compound is for the production of formed taxane is Nonataxel.

## 110-112. (Canceled)

- 113. (New) The method of claim 1, wherein the method further comprises contacting the benzoylation solution with an amine containing compound after the benzoylation reaction is complete.
- 114: (New) The method of claim 113, wherein the amine containing compound comprises a primary amine.
  - 115. (New) The method of claim 113, wherein the amine containing compound

Response dated February 25, 2009

Reply to Office Action of September 26, 2008

Page 8

comprises ammonium hydroxide.

- 116. (New) The method of claim 113, wherein the method further comprises isolating an organic layer and washing the organic layer with a composition comprising an amine containing compound.
- 117. (New) The method of claim 13, wherein the solvent used in step (iii) is selected from the group consisting of methyl tert-butyl ether, dichloromethane, heptane, hexane, toluene, and trifluorotoluene.
- 118. (New) The method of claim 13, wherein the acid used in step (ii) is selected from the group consisting of sulfuric acid, nitric acid, phosphoric acid, tartaric acid, p-toluene sulfonic acid, picric acid, and combinations thereof.